

Silicon Valley Rapid Transit Corridor

San Jose, California

(November 2002)

Description

The Santa Clara Valley Transportation Authority (SCVTA) is proposing to implement a 16.3-mile Heavy Rail line from the proposed Bay Area Rapid Transit (BART) Warm Springs station to Downtown San Jose and to the Norman Y. Mineta International Airport. The proposed system would serve the rapidly growing heart of Santa Clara County and Silicon Valley and would connect the SCVTA's light rail and bus system to the BART system, increasing transit access to a large area of Santa Clara and Alameda counties as well as San Francisco. Silicon Valley is one of the fastest growing areas in the United States in job growth and thus, has surpassed housing availability. Therefore, large numbers of commuters must travel to jobs in San Jose from Alameda and Contra Costa counties, which creates congested traffic conditions on I-680 and I-880. The proposed BART extension to San Jose would provide the Silicon Valley commuters a high quality transit alternative to driving on the heavily congested roadways and increase connectivity to San Francisco, Oakland, and other areas served by the existing 95-mile BART system.

Summary Description	
Proposed Project:	Heavy Rail Transit Line 16.3 miles, 7 Stations
Total Capital Cost (\$YOE):	\$4.77 Billion
Section 5309 New Starts Share (\$YOE):	\$973.0 Million (20%)
Annual Operating Cost (2025 \$YOE):	\$100.1 Million
Ridership Forecast (2025):	87,000 Average Weekday Boardings 38,600 Daily New Riders
Opening Year Ridership Forecast:	N/A
FY 2004 Finance Rating:	Medium
FY 2004 Project Justification Rating:	Not Yet Available
FY 2004 Overall Project Rating:	Not Yet Available

The project rating is *Not Yet Available* because the transportation system user benefit measure used for cost effectiveness and mobility improvements was not submitted. Consequently, project justification could not be rated. This project entered Preliminary Engineering in late 2002, and did not have sufficient time to implement the new measure. FTA continues to work with the project sponsor to develop this measure. FTA will rate the project and make that information available to Congress and other interested parties when the analysis is complete. The overall project rating applies to this *Annual Report on New Starts* **and reflects conditions as of November 2002**. Project evaluation is an ongoing process. As New Starts projects proceed through development, the estimates of costs, benefits, schedule, and impacts are refined. **The FTA ratings and recommendations will be updated annually to reflect new information, changing conditions, schedules and refined financing plans.**

Status

The SCVTA conducted a Major Investment Study to consider potential transportation options in the corridor beginning in March 2001. The Major Investment Study considered 11 alternatives including bus, commuter rail, light rail, and heavy rail alternatives. In November 2001, based upon the findings of the MIS, the VTA and BART Board of Directors adopted the heavy rail extension as the Locally Preferred Alternative. The Metropolitan Transportation Commission (MTC) adopted the Locally Preferred Alternative into the region's financially constrained long range plan in December 2001. FTA approved the SCVTA's request to initiate Preliminary Engineering in September 2002.

TEA-21 Section 3030(a)(74) authorized the San Francisco Bay Shore corridor for Final Design and construction. Through FY2002, no Section 5309 New Starts funds have been appropriated for the proposed project by Congress.

Evaluation

The following criteria have been estimated in conformance with FTA's *Reporting Instructions for the Section 5309 New Starts Criteria*, updated in June 2002. FTA has evaluated this project as being in Preliminary Engineering. The project will be reevaluated when it is ready to advance to Final Design and for next year's *Annual Report on New Starts*.

Project Justification

Rating: Not Yet Available

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Based on 2000 Census data, there are an estimated 4,000 low-income households within a ½-mile radius of the proposed stations, representing nine percent of all households located within ½-mile of the stations. There are an estimated 48,500 employees within ½-mile of the transit station areas. The San Francisco-Oakland-San Jose area is classified as a “non-attainment” area for ozone, and “attainment” area for carbon monoxide, particulate matter and nitrogen oxides. The Silicon Valley Rapid Transit Corridor has an incremental cost-per incremental trip value of \$26.40.

Project Justification Quantitative Criteria		
Mobility Improvements Rating: Not Yet Available		
Average Employment Per Station Average Low Income Households Per Station Transportation System User Benefit Per Project Passenger Mile (Minutes)	<u>New Start vs. Baseline</u>	
	6,918	
	575	
	Not Yet Available	
Environmental Benefits Rating: Medium-High		
<u>Criteria Pollutants Reduced</u> (tons)	<u>New Start vs. Baseline</u>	
Carbon Monoxide (CO)	260	
Nitrogen Oxide (NO _x)	60	
Hydrocarbons	220	
Particulate Matter (PM ₁₀)	11	
Carbon Dioxide (CO ₂)	28,700	
<u>Annual Energy Savings</u> (million) BTU	342,960	
Cost Effectiveness Rating: Not Yet Available		
Cost Per Transportation System User Benefit (current year dollars/hour)	<u>New Start vs. Baseline</u>	
	Not Yet Available	
Operating Efficiencies Rating: Medium		
System Operating Cost per Passenger Mile (current year dollars)	<u>Baseline</u>	<u>New Start</u>
	\$0.24	\$0.22

[] indicate an increase in emissions.

Existing Land Use, Transit-Supportive Land Use Policies and Future Patterns Rating: Medium-High

The *Medium-High* rating reflects the urban character of the corridor, the large number of major trip generators served, and the generally transit-supportive zoning in areas served by the proposed project.

Existing Conditions: The Silicon Valley Rapid Transit Corridor study area includes a variety of land uses including high density residential, commercial and office uses in downtown San Jose, the San Jose Arena, the Compaq Center, the Great Mall of the Bay Area regional shopping mall, and several large scale corporate campus areas, the Norman Y. Mineta San Jose International Airport, the Santa Clara University, and San Jose State University. The corridor has dense concentrations of population and employment. There are 46,000 persons (8,300 persons per square mile) within ½-mile of the station areas. Employment in the proposed station areas, with 52,000 employees (9,500 per square mile) is also very dense. Much of the corridor is auto-

oriented, however, major shopping areas in downtown San Jose and Milpitas are pedestrian-oriented. Many of the existing industrial areas are re-developing into residential and commercial land uses to keep up with increasing demand. While the Great Mall of the Bay Area, the San Jose Flea Market, and many of the corporate campus areas of the corridor have free parking, there is limited parking availability in downtown San Jose and near the universities along the alignment.

Future Plans, Policies and Performance: The County of Santa Clara, the City of San Jose, the City of Milpitas, and the City of Santa Clara each have comprehensive plans that support high density, transit oriented development, support pedestrian accessibility, and promote transit supportive development at proposed station areas. There are Transit Oriented Development Overlay Zones in the Milpitas Midtown Specific plan, the City of San Jose General Plan has a designation for Transit Corridor Residential Development within transit station areas and the City of Santa Clara plan identifies mixed use and high-density land use patterns within ½-mile of transit station areas. In addition the Metropolitan Transportation Commission (MTC) promotes a Transportation for Livable Communities program to improve pedestrian accessibility and streetscape environments. The population and employment in the corridor through 2025 is expected to increase by 20 and 35 percent, respectively, with approximately 330,000 people and 308,000 employees in the project corridor by 2025.

Local Financial Commitment

Rating: Medium

The rating of *Medium* is because of the Medium rating for the Capital Financial Plan and the *Medium* rating of the Operating Financial Plan.

Proposed Non-Section 5309 New Starts Share of Total Project Costs: 20%

Rating: High

The SCVTA plans to use Section 5309 New Starts funds, State funding sources, and Measure A dedicated sales tax funds to construct the proposed project.

Locally Proposed Financial Plan		
<u>Proposed Source of Funds</u>	<u>Total Funding (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 New Starts	\$973.0	20.4%
State: Traffic Congestion Relief	\$649.0	13.6%
Local: Measure A	\$3,149.8	66.0%
Total:	\$4,771.8	100.0 %

NOTE: Funding proposal reflects assumptions made by project sponsors, not DOT or FTA. Total may not add due to rounding.

Stability and Reliability of Capital Financing Plan

Rating: Medium

The *Medium* rating reflects the high level of local capital funding committed to the proposed project, tempered by the potential for cost increases as Preliminary Engineering is completed and Final Design is underway, particularly for the 7.4-mile tunnel portion of the project.

Agency Capital Financial Condition: The capital financial condition of the SCVTA is good. However the Silicon Valley area is not generating the level of revenues from sales taxes as previously forecasted, thus, the level of capital funding available may leave little room for cost increases. The SCVTA received ratings of AA from Fitch, AA3 from Moody's, and AA from Standard and Poor's for its May, 2001 bond issue. The average age of SCVTA's bus fleet is 6.5 years.

Capital Cost Estimates and Contingencies: The capital cost estimate includes a 20 percent contingency which is low for this stage of project development.

Existing and Committed Capital Funding: In November 2000, voters in Santa Clara County passed Measure A, which is a 0.5 percent sales tax designated specifically to undertake the proposed Silicon Valley Rapid Transit corridor project as well as improved bus, commuter rail, and light rail services. In July 2000, the State Transportation Congestion Relief Program was created, and \$649 million was committed toward the project. While the program is new, the underlying revenue sources already exist and do not require voter approval. These funds are considered committed, but have a six-year sunset provision. All local and State capital funding sources are existing and committed towards the project.

New and Proposed Capital Funding Sources: In July 2000, the State Transportation Congestion Relief Program was created, and \$649 million was committed toward the project.

Stability and Reliability of Operating Finance Plan

Rating: Medium

The *Medium* rating reflects the SCVTA operating plan, as reported by the SCVTA in July of 2002. FTA is concerned about the agency's optimistic revenue assumptions in the twenty-year operating plan. The SCVTA needs an additional source of operating funds to address a shortfall in system operating funds.

Agency Operating Financial Condition: The SCVTA was in good operating condition through the end of 2000. However, since that time, operating revenues have been flat or declining. Additionally, operating costs have increased due to new system extensions and increased labor costs. Thus, operating deficits are forecast unless the SCVTA identifies a new source of operating funds.

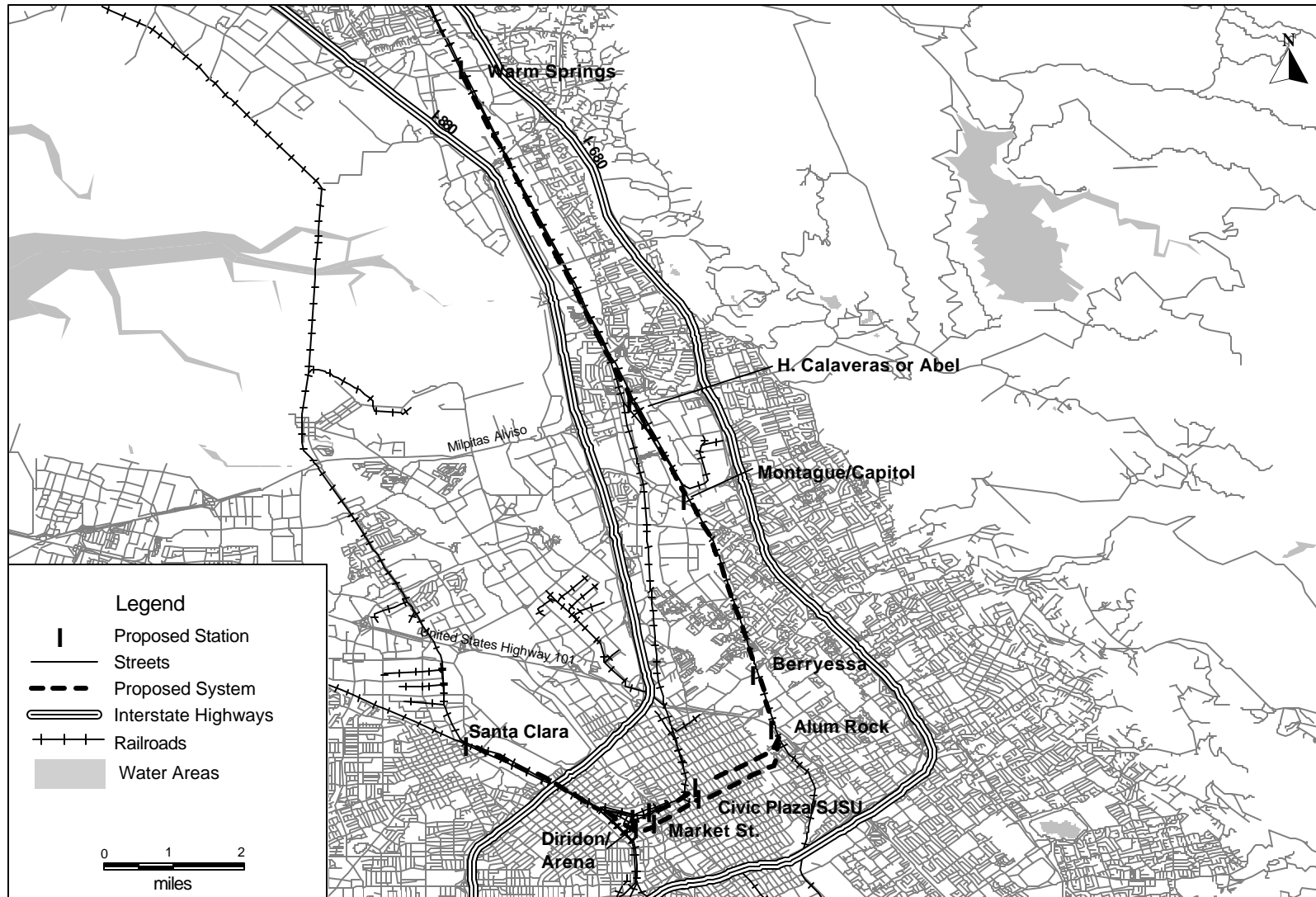
Operating Cost Estimates and Contingencies: The operating and maintenance cost estimates appear reasonable, based on an analysis of forecasted growth in cost per revenue hour compared to the period from 1991 through 2001. The anticipated annual operating cost of \$100 million for the proposed project will place a burden on the already limited operating revenue sources.

Existing and Committed Funding: The SCVTA's ability to operate and maintain the existing transit system, as well as the proposed project, is dependent upon the availability of new revenues. At this time, sufficient operating revenues are not committed to project. Thus, SCVTA is seeking political support for a new local tax that will be essential for both continued operations and to support the project's operations and maintenance cost.

New and Proposed Operating Funding Sources: The SCVTA is considering a number of new operating revenue sources including a share of revenues from a regional gas tax that the Bay Area's Metropolitan Transportation Commission is authorized to place on the ballot (\$25 million to \$45 million for SCVTA) and other potential sources of funding. However, additional legislative authority is required before these funding sources may be used.

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Federal Transit Administration 2002

